TL 2132

A.S.E.A. - REHAB

RECONSTRUCTIVE SURGERY/REHABILITATION PROGRAM PROFILE

Northmed Inc.

A.S.E.A. - REHAB: Australia - South East Asia Rehabilitation Foundation is a Reconstructive Surgery - Rehabilitation network in South East Asia run under the auspices of NORTHMED Inc.. It focuses on rehabilitation of the disabled - in particular, leprosy, poliomyelitis, burns, trauma and congenital defects, especially in children. All of these conditions are physically disabling and visually disturbing problems. Reconstructive surgery has the ability to change this. Its results are immediately recognisable and can be appreciated by the patient, friends and family. Its impact has the potential to open the door to other Public Health initiatives.

A.S.E.A. - REHAB: AUSTRALIA - SOUTH EAST ASIA REHABILITATION FOUNDATION

BACKGROUND

A.S.E.A. - REHAB is a Reconstructive Surgery - Rehabilitation program in South East Asia run under the auspices of NORTHMED (The Northern Territory Medical Overseas Aid Council, Inc.), an organisation registered in the Northern Territory. It aims at rehabilitation of patients with physical disabilities arising from leprosy, burns, trauma, poliomyelitis and congenital defects, particularly amongst children. The program originally arose out of a desire by the Governments of the Northern Territory and the Indonesian Province of Nusa Tenggara Timur to establish mutually advantageous working relationships in the fields of health and medicine. The first step in this process was the formation of 'Sister Hospitals' in 1991, focussing on rehabilitation of the disabled, centred on Soe hospital, West Timor. As the program developed, the Australian participants were invited to other centres in West Timor, Flores and East Timor (both Governmental and non-Governmental). Funding came initially from a 'Professional Development' grant from AIDAB, followed by three consecutive annual grants from the Australia Indonesia Institute. A.S.E.A. - REHAB now also seeks funding from other sources.

OBJECTIVES

The overall goal of the program is to establish and consolidate a network for rehabilitation of the disabled, presently in the Nusa Tenggara Timur province of Indonesia, but later also in other parts of South East Asia

Specific purposes are:

1 To extend physical rehabilitation services to people suffering from disability arising from leprosy, poliomyelitis, burns, trauma and congenital defects, with special reference to children in Cancar (Flores), Atambua and East Timor. This should extend to other parts of South East Asia as the program develops

2. To ensure that disabled patients have access to general rehabilitation services, such as splints, prostheses and physiotherapy in Soe, West Timor

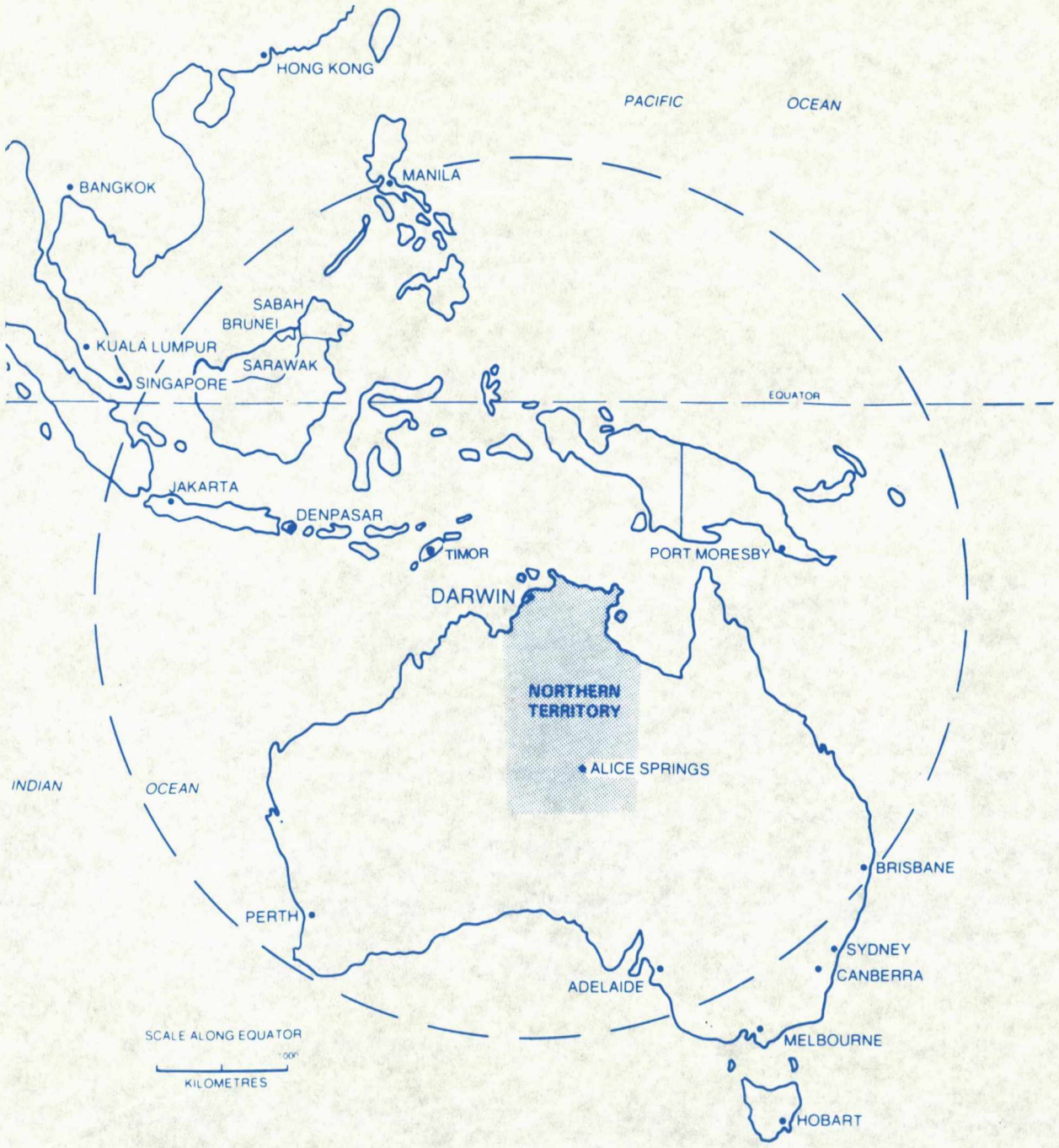
3. To improve care for physically disabled leprosy patients through leprosy paramedics in village health centres, particularly in Kefamenanu and in a pilot area of East Sumba

4. To identify local medical, nursing and paramedical staff for the purposes of providing appropriate 'on-site' training and Primary Health Care Workshops

5. To identify social rehabilitation priorities and to devise appropriate strategies to address them

6. To expand to other areas in South East Asia as opportunities arise

MAP OF THE REGION



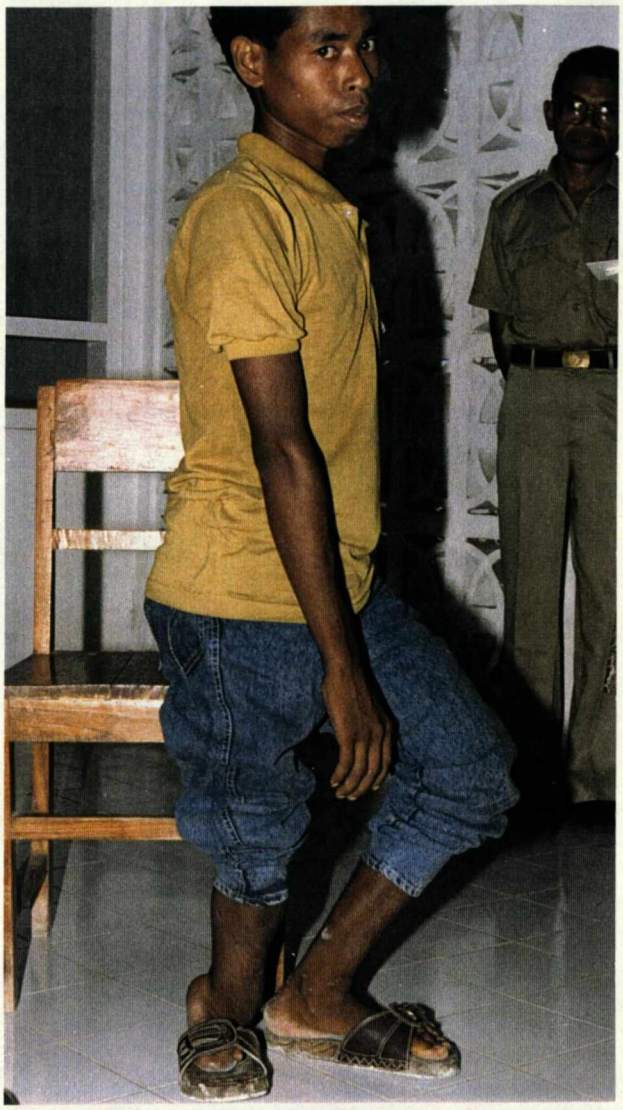
Darwin is the centre of a large area embracing most of Australia to the south and much of Indonesia, Papua New Guinea, Brunei, part of Malaysia and most of the Philippines to the north

RECONSTRUCTIVE SURGERY:

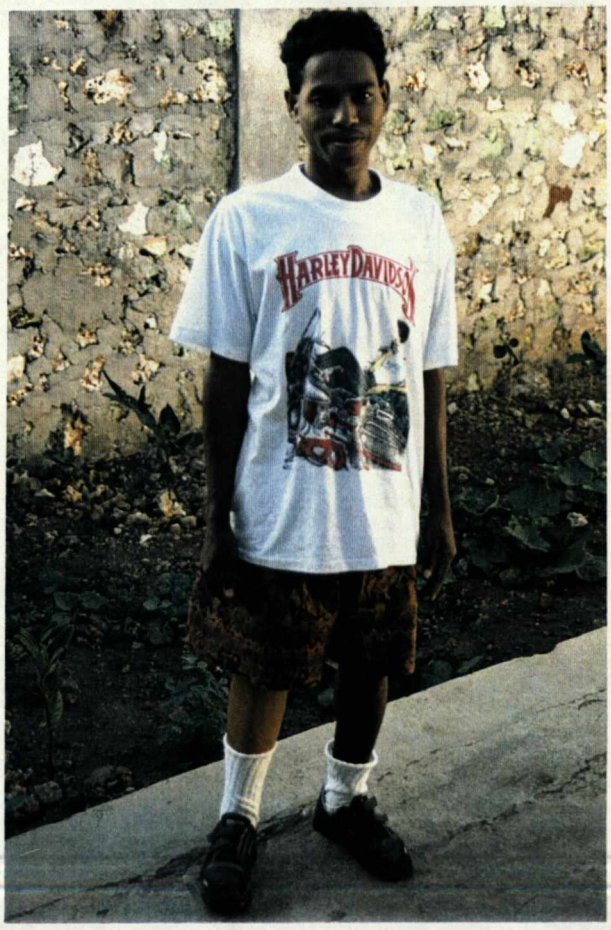
Reconstructive Surgery can make a profound impact on patients' attitudes. It produces immediate results and can be seen by all. It has the potential to return people to the workforce. It can prevent permanent disability, especially if it is tackled early, but above all it can open the door to Public Health initiatives. The pictures that follow demonstrate some of the problems encountered in the eastern Provinces of Indonesia. Voluntary and non-governmental organisations (NGOs) such as local Yayasans have the capacity to help in rehabilitation of such patients pre and post-operatively. As well, the Pusat Rehabilitasi Yakkum (a comprehensive rehabilitation centre in Yogyakarta) has given valuable support to the project: They trained a prosthetic technician from Soe to make prostheses for amputees and splints for patients with paralysed limbs. They have also trained a surgical shoemaker and will shortly train a staff member in relevant physiotherapy techniques. They have accepted patients from Soe for rehabilitation and in turn we have accepted patients from Yogyakarta for Reconstructive Surgery both in Soe and in Darwin

It is hard to imagine how this young man has put up with such a deformity for so long. He is a farmer and sustained a severe burn to his forearm in his youth. Following this, the hand contracted down into the forearm and two of his fingers actually became embedded and buried in his forearm. He has already had two operations to free the hand and still needs a further one to stabilise the thumb. Already he has significant improvement in function and is looking forward to having a hand that not only looks better but one that is more useful

REHABILITATION OF DISABLED CHILDREN IS ONE OF **A.S.E.A. - REHAB's** PRIMARY OBJECTIVES



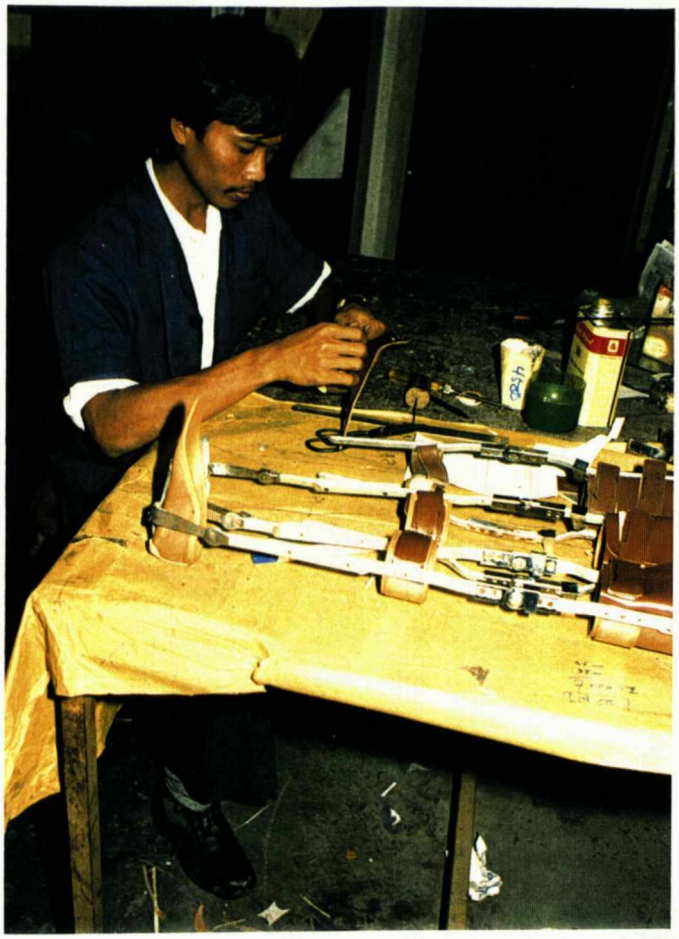
This young man from Kefamenanu was born with a serious deformity of his leg and foot resulting in significant shortening. He had to bend his other knee permanently in order to walk



Following a formal amputation of the deformed stump at the local hospital he was fitted with a prosthesis by a technician on loan to Soe Hospital from the *Pusat Rehabilitasi Yakkum (Yogyakarta)*

This young boy from a village near Soe (Timor) was bitten by a snake. To save his life the villagers chopped off his foot. He was fitted with a prosthesis by a technician on loan to Soe Hospital from the *Pusat Rehabilitasi Yakkum (Yogyakarta)*. Another technician is presently training in Yogyakarta and will return to work in Soe Hospital in 1995

Neurofibromatosis or Von Rechlinghausens's disease is common in Timor and can be very disfiguring, especially in children



The *Pusat Rehabilitasi Yakkum (Yogyakarta)* has been very generous in training staff from Soe Hospital (Timor) for shoemaking and in Field Work. This photograph shows a disabled staff member working there. We believe that a long-term and mutually advantageous relationship is developing between the Pusat and Soe Hospital. A technician from Soe hospital has been trained in Yogyakarta to make prostheses at, and at the expense of the Pusat Rehabilitasi Yakkum. The photograph on the left shows a technician making prostheses at the *Pusat (Yogyakarta)*. Soe Hospital, Central Timor, is setting up a workshop to make prostheses

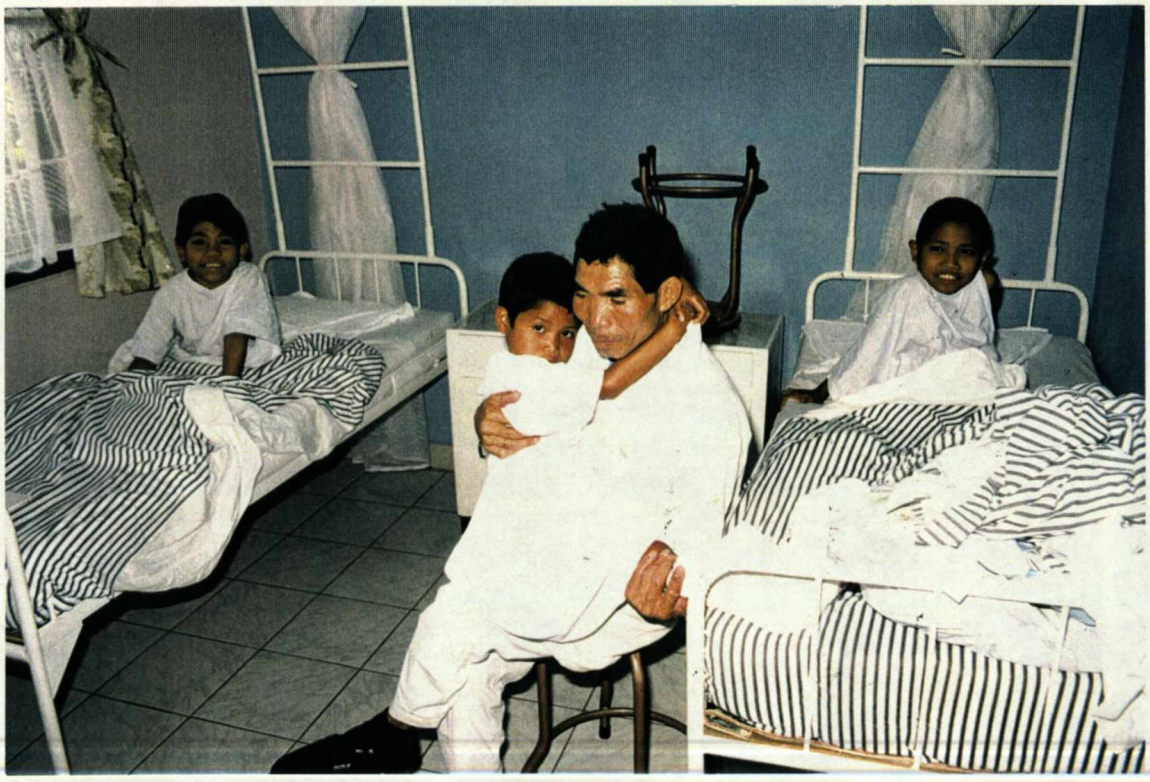
This young man's hand was burned while living in Java, leaving him with a useless thumb and contracted fingers. Since he was a Field Worker with the *Pusat Rehabilitasi Yakkum* in Yogyakarta he was sent to Timor for Reconstructive Surgery as part of the co-operative relationship developing between that centre and Soe Hospital. He needed two operations to correct the deformity and these were done by the combined Australian / Indonesian Reconstructive Surgery team at Soe Hospital

A physiotherapy session at Cancar with locally trained staff (left)

The *Rumah Sakit St Damian*, at Cancar in Manggarai, West Flores is an example of a well established rehabilitation centre. Patients have access to physiotherapy and social rehabilitation in a caring environment. Many different types of patients are accommodated at Cancar - leprosy, birth defects, post-poliomyelitis patients, burn contractures, all sorts of physical and mental disabilities. The community is virtually self-supporting and no matter how severe the disability, every patient has a place in the community and almost everyone does some work.

Patients from Timor have been referred to Cancar to be fitted with prostheses while waiting for similar facilities currently being developed in Soe. While at Cancar, they work in the limb-fitting department and also receive physiotherapy

Post-operative care at Cancar

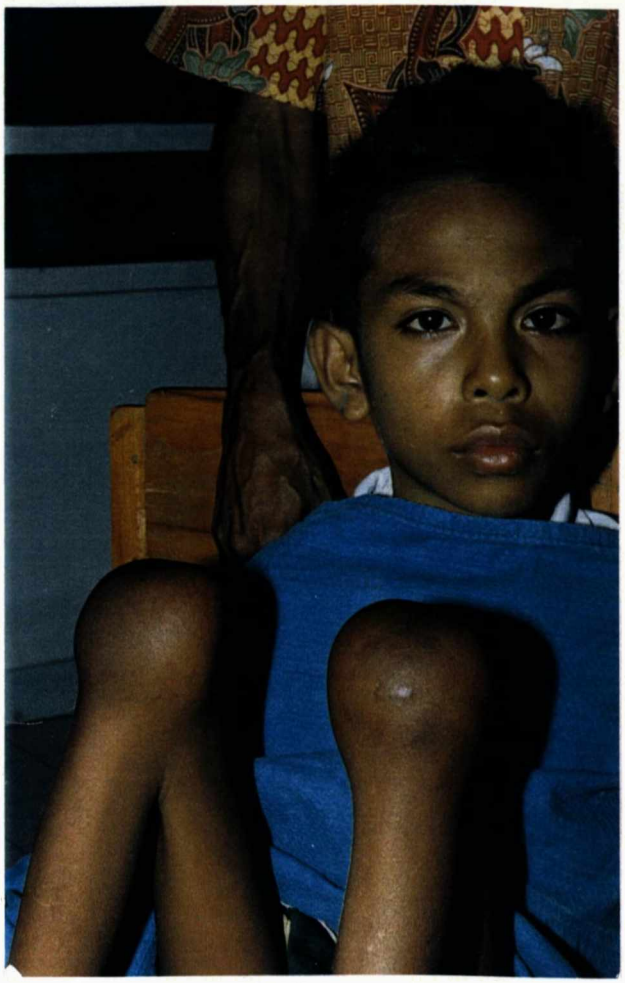


This massive tumour had been present on this woman's back for some years. By the time she presented, it was badly infected and was extremely offensive. It was treated with antibiotics and was then removed under local anaesthesia in the Outpatients Department of Soe Hospital

A year later, although she has a scar, that can be hidden underneath her dress, there is no recurrence of the tumour

This woman developed a skin cancer below her eye. It was a long time before she presented herself at her local PUSKESMAS. At that stage, there was a large wound defect left after excision of the tumour and this had to be replaced with a full-thickness skin graft.

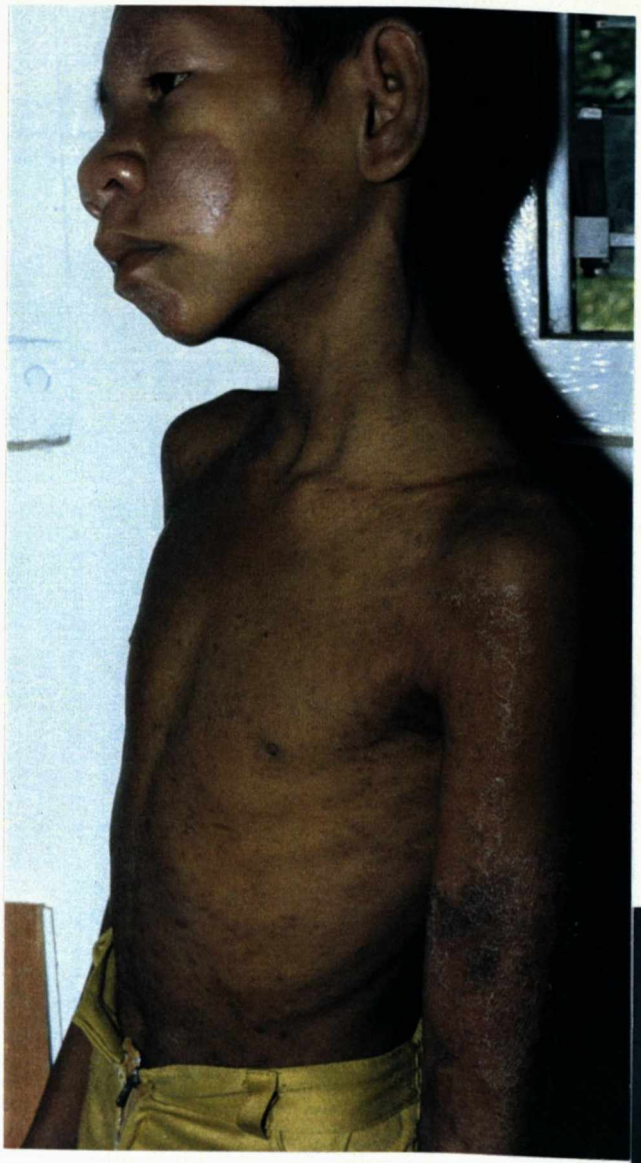
She is seen here more than a year after her operation and fortunately has no recurrence



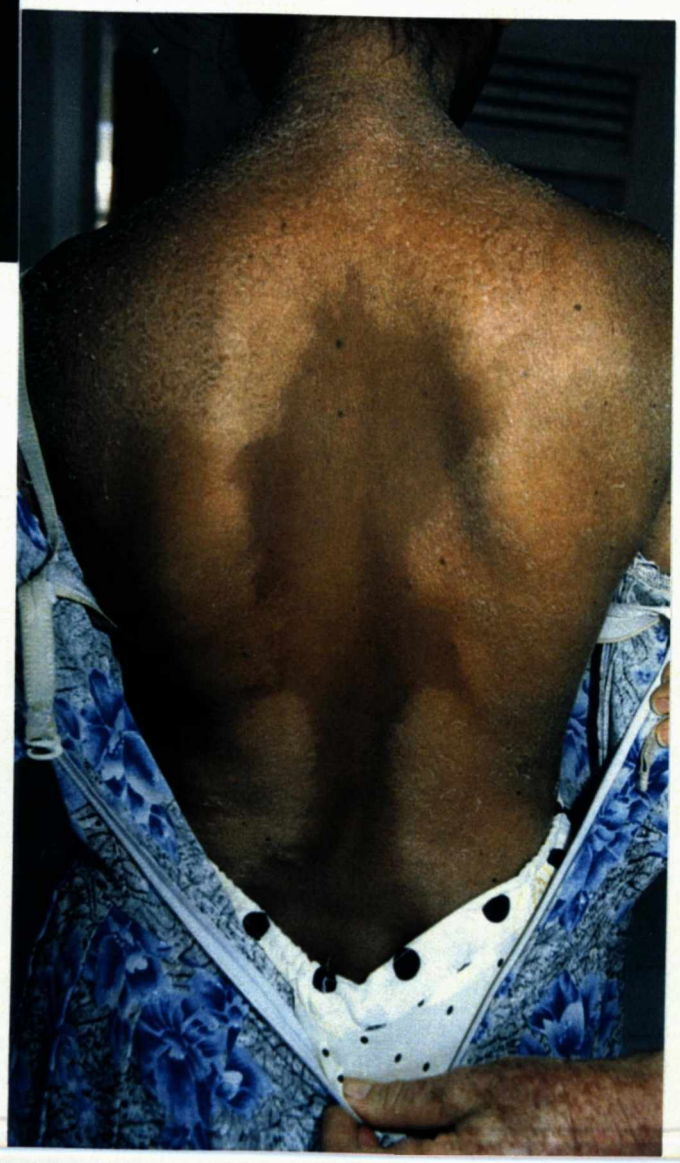
This young boy (left) probably has severe crippling juvenile rheumatoid arthritis of the knees. He had been sitting in a village for many months with his knees bent so that they became fixed in this position. By releasing the tendons at the back of his knees the legs could be partially straightened, but he also needs physiotherapy. Although the treatment is not complicated, the problem is not easily solved because his village is in an very remote part of Timor. This underlines the need for Field Workers and Physiotherapy Aides who can visit his home rather than expect him to go to the hospital regularly

Birth deformity or that occurring in early infancy - for example from poliomyelitis as shown on the right - can lead to severe disability. If patients live a long way from large clinics or hospitals it can go undetected for a long time. Patients may also fear surgery and sometimes hide a deformity because they are ashamed of it. So far, this girl's problems have not been solved

One of the most common problems encountered is untreated talipes. If it were corrected early, there would not be any need for this sort of surgery. Problems are compounded when neglected at birth



Leprosy is still common in Timor. There is a very good Yayasan at Kefamenanu to care for leprosy patients and their relatives. Early diagnosis is essential if deformity is to be prevented and this is a good illustration of the importance of voluntary agencies in the overall control program. Contrary to popular belief in some regions, leprosy is often seen in children. They should be examined regularly if it is to be eradicated



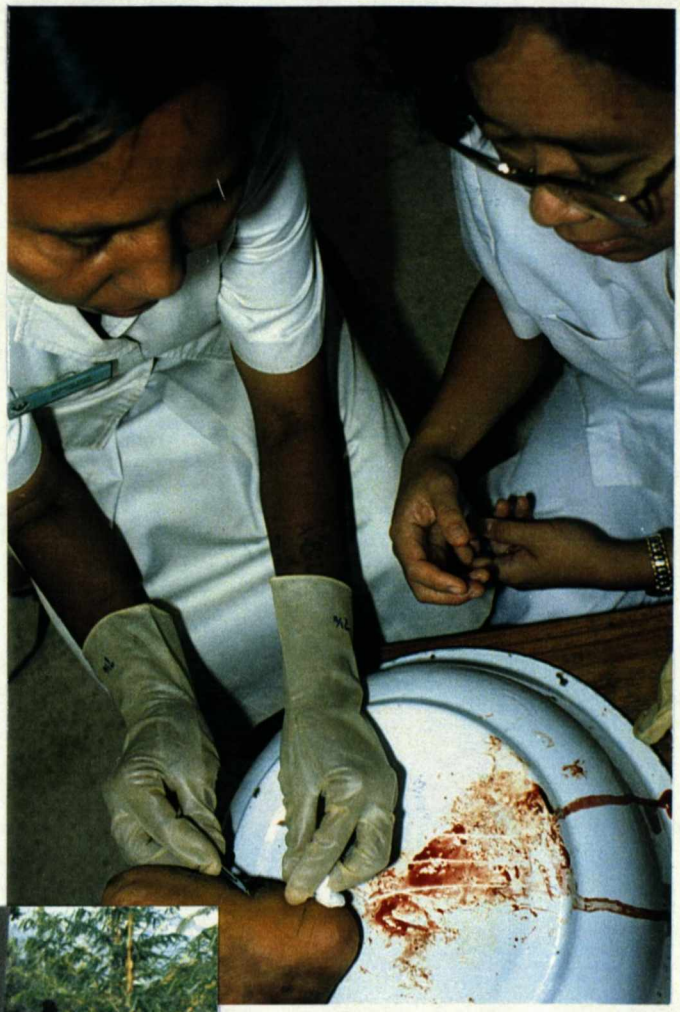
Tinea and other skin conditions can easily be confused with leprosy and sometimes they co-exist. By treating deformity in leprosy we can motivate patients and leprosy workers to diagnose leprosy early in the piece before deformity has occurred. The Reconstructive Surgery Program is therefore one way of opening the door to Public Health initiatives

Leprosy patients lose sensation in their hands and feet and frequently develop disabling ulceration. Feet need regular attention, but this can be done at any PUSKESMAS (Rural Health Centre) if staff have the proper training. Where local Yayasans exist, there is the real potential to improve the overall care of leprosy patients with the simplest but eminently affordable means. There are three important principles:

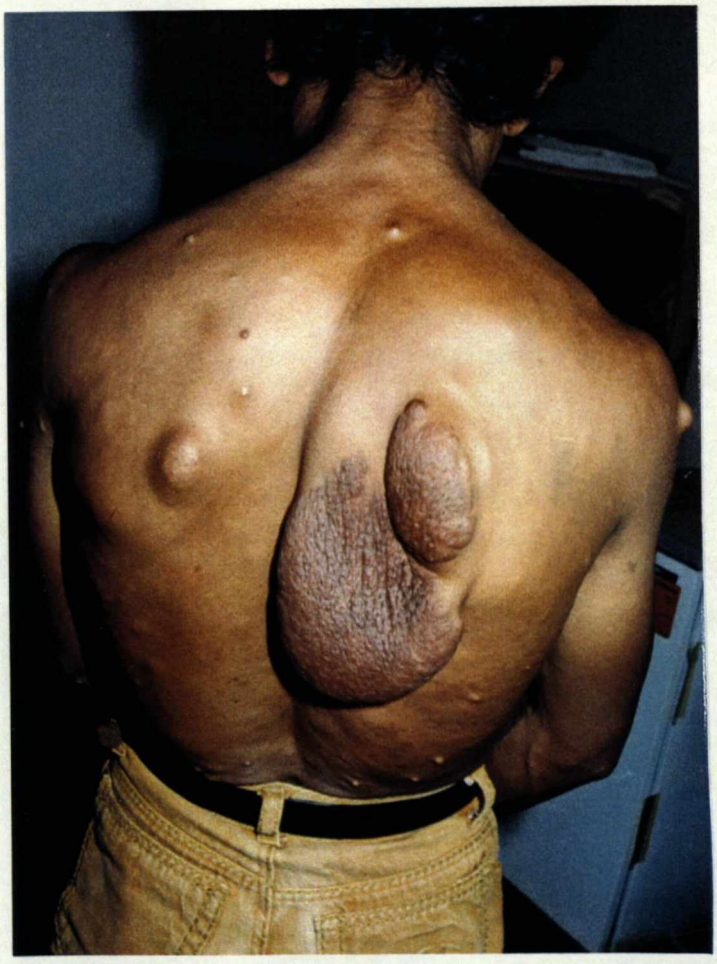
1. Hand and foot care is simple and inexpensive and within the capacity of any PUSKESMAS

2. If you care for deformity you will convince patients that is worth their while to take important anti-leprosy medication. In this way the care of deformity can affect other Public Health issues

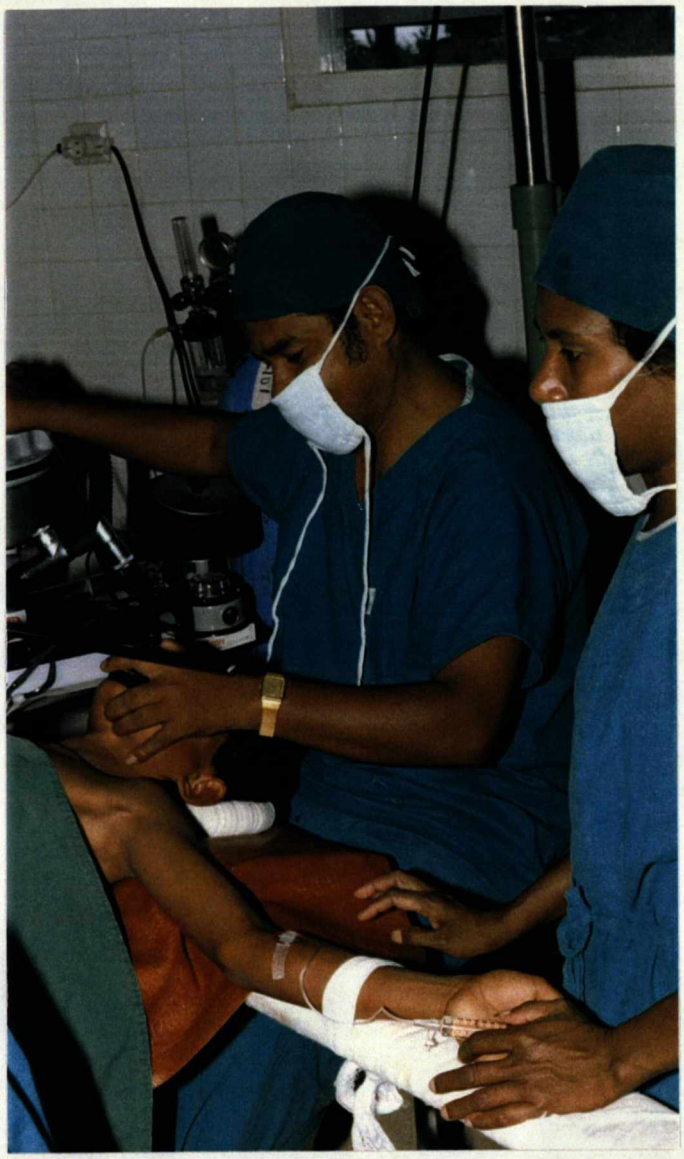
3. Self-care must always be a primary principle



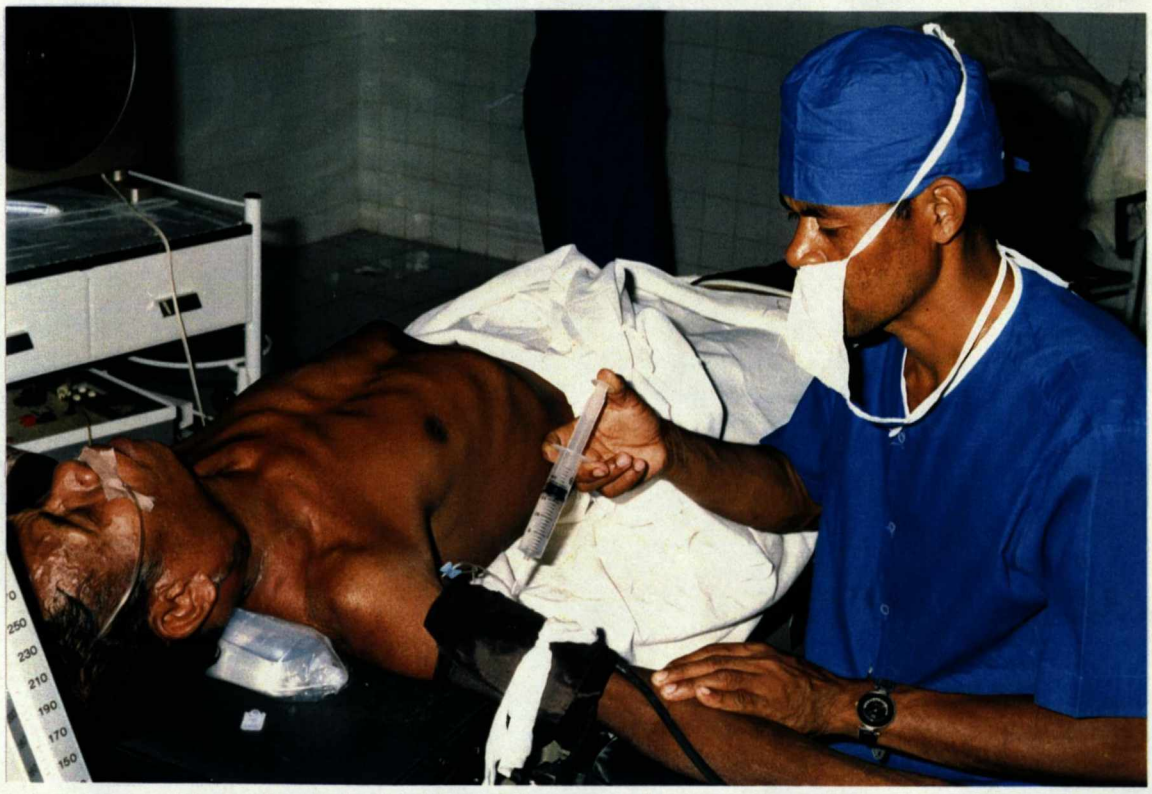
This massive tumour was less than a year old. It was removed under local anaesthesia at Kefamenanu Hospital.



Neurofibromatosis, which is also called Von Rechlinghausen's disease, is quite common in Timor. In this case it is nothing more than a nuisance but in some cases it has the potential for serious sequelae. These tumours were easily removed giving considerable relief



Operating Room personnel in
Kefamenanu and Soe Hospitals



NORTHMED

- The Northern Territory Medical Overseas Aid Council was set up in 1991 and incorporated in 1992 specifically to address ways (including fund-raising) in which the Northern Territory and our near neighbours could co-operate in joint medical programs within the region. In 1994 it was re-structured to facilitate and co-ordinate relevant medical programs. Its members include a body of expertise, particularly in medical, nursing and scientific fields. **A.S.E.A. - Rehab** is a Reconstructive Surgery - Rehabilitation program in South East Asia, which operates under the auspices of NORTHMED. It focuses on rehabilitation of the disabled - in particular, leprosy, poliomyelitis, burns, trauma and congenital defects, especially in children. A.S.E.A. - Rehab is presently NORTHMED's flagship. A.S.E.A. - Rehab perceives the need to broaden its panel of Consultants, and thus its range of expertise, to include people outside the Northern Territory. It is in the process of implementing this policy. NORTHMED is engaged in building important links with 'The Committee for Darwin' as Australia's northern link to East Asia.

PROGRAM DETAILS

PLACE	TOTAL SEEN	CHILDREN	PERCENT CHILDREN	TOTAL OPERATIONS	OPERATIONS CHILDREN	% OPERATIONS CHILDREN	LEPROSY	VISITS
ATAMBUA	58	31	53	21	13	62	5	3
CANCAR	167	105	63	56	34	61	7	3
KEFA	368	103	28	82	17	21	130	10
SOE	450	150	33	144	50	35	82	20
SUMBA	574	42	7	9	4	45	564	4
EAST TIMOR	50	21	42	6	2	33	3	3
TOTAL	1667	452	27	318	120	38	791	X

A.S.E.A. - Rehab - NORTHMED's rehabilitation program in South East Asia is seeking funding to continue and expand its activities. Donations should be sent to:

A.S.E.A. Rehab
GPO Box 820, Darwin, Northern Territory, Australia, 0801 Tel: (089) 22.8020 Fax: 85.5078

John Hargrave, AO, MBE, MD, FRACS, DTM & H
Ellen Kettle, MBE, RN, FRCNA
Luciana Nicholls, BA
Philip McMahon, RN

Darwin, Northern Territory - March 1995

ACKNOWLEDGMENTS:

We are very much indebted to the Office of the Minister for Health, the Cabinet of the Northern Territory Government, the staff of the Department of Health and Community Services and the Royal Darwin Hospital Management Board for their substantial help and enthusiasm in setting up and keeping this project running.

The role of our Indonesian counterparts has been vital in promoting and supporting the Reconstructive Surgery / Rehabilitation project. They have provided all the logistic support so critical to the success of the program in Indonesia and have been enthusiastic supporters throughout. It is through them that an imaginative project came of age.

Above all we are indebted to the **Australia / Indonesia Institute** for sustaining the project for several years and for their ongoing support and advice. Without their help it is doubtful if it would ever have got off the ground.

We have also received very generous and significant help from a number of other people and sources. Their names are listed in alphabetical order below:

AIDAB - Professional Development Grant
Alphapharm (Staphylex)
American Womens' Association, Jakarta
Astra Pharmaceuticals Pty Ltd (Marcain)
Australian Ambassador - Jakarta
Bayer Australia Ltd (Ciproxin)
Ciba Geigy Australia Ltd (Lampren)
Country Womens' Association (Northern Territory)
Department of Industry & Development (N.T.)
Eli Lilly Pty Ltd (Keflex and Keflin)
Evans, Hon Senator Gareth
IATVEP - Indonesian Australian Training Vocational Educational Project
Indonesian Missionary Church
I.T.S. Pty Ltd (Darwin)
Johnson & Johnson Medical Pty Ltd (Adelaide)
Masonry in the Northern Territory
Merrell Dow Pharmaceuticals (Rifampicin)
Merpati Airlines (Darwin)
Northern Territory Interpreter & Translation Service (Office of Ethnic Affairs)
Orthocare Pty Ltd (C-Wire Serter)
V.B. Perkins, Darwin
Parke-Davis Pty Ltd (Ketamine)
Pusat Rehabilitasi Yakkum (Yogyakarta)
QUOTA Club, Darwin
Rotary Club of Darwin (Operating room facilities)
Rotary Club of Port Darwin (Diathermy - Sumba)
Rotary - Darwin South (Diathermy - Atambua)
Royal Darwin Hospital Management Board
Schulz, Dennis
Smith Kline Beecham (Flucloxacillin)
Smith and Nephew (Adelaide)
Valleylab, Australia (Diathermy products)